Process for the preparation of heterologous bispecific antibodies

Publication number: JP9506001 (T) 1997-06-17 Publication date:

Inventor(s): Applicant(s): Classification:

- international: C12N15/02; C07K1/22; C07K16/12; C07K16/46; C12P21/08;

C12R1/91; C12N15/02; C07K1/00; C07K16/12; C07K16/46;

C12P21/08; (IPC1-7): C07K16/12; C12P21/08; C07K1/22;

C07K16/46; C12N15/02; C12P21/08; C12R1/91

- European: C07K16/46D

Application number: JP19960500228T 19950516

Priority number(s): DE19944419399 19940603; WO1995EP01850 19950516

Abstract not available for JP 9506001 (T)

Abstract of corresponding document: DE 4419399 (C1)

The invention pertains to a method for producing heterologous bispecific antibodies. The object of the invention is a method designed to yield heterologous bispecific antibodies with a high level of purity. This is attained by producing a quadroma fused from hybridomas, one of which produces antibodies that have an affinity to the binding site of protein A and the other of which produces antibodies that have a weaker or no affinity to the binding site of protein A; by propagating and cultivating the quadromas as usual, and by eluting the bsAk in a pH range at least 0.5 units above the pH at which the antibodies with greater affinity to the binding site of protein A are still bonded.

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Also published as:

JP3400457 (B2)

DE4419399 (C1)

EP0763128 (A1)

🔼 EP0763128 (B1)

AT187176 (T)

more >>

(19)日本国特許庁(JP)

(12) 公表特許公報(A)

(11)特許出願公表番号 特表平9-506001

(43)公表日 平成9年(1997)6月17日

(51) Int.Cl. ⁶		識別記号	庁内 整理番号	FΙ			
C 1 2 P	21/08		9358-4B	C12P 21,	/08		
C 0 7 K	1/22		9356-4H	C07K 1,	/22		
	16/46		9356-4H	16,	/46		
C 1 2 N	15/02		9356-4H	16,	/12		
# C07K	16/12		9162-4B	C 1 2 N 15	/00	С	
			審查請求	有 予備審	查請求 有	(全 25 頁)	最終頁に続く

(21) 出願番号 特願平8-500228

(86) (22)出顧日 平成7年(1995) 5月16日 (85)翻訳文提出日 平成8年(1996) 12月2日

(86)国際出願番号 PCT/EP95/01850

(87)国際公開番号 WO95/33844 (87)国際公開日 平成7年(1995)12月14日 (31)優先権主張番号 P4419399.8

(32) 優先日1994年6月3日(33) 優先権主張国ドイツ (DE)

(81)指定国 EP(AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), CA, JP, US

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(54) 【発明の名称】 異種二重特異性抗体の製造法

(57)【要約】

本発明は、異種二重特異性抗体の製造法に関する。本発明の課題は、高い純度での異種二重特異性抗体を製造することができるような方法を実施することである。前記課題は、1つのハイブリドーマが、蛋白質Aの結合ドメインに対する親和性を有する抗体を生産し、別のハイブリドーマは、第一の抗体と比べて、蛋白質Aの結合ドメインに対して弱い親和性を有するかまたは親和性を有していない抗体を生産するようなハイブリドーマから融合されたクアドロームの製造、該クアドロームの常法による増殖および培養並びに蛋白質Aの結合ドメインに対してより強い親和性を有する抗体がなお結合しているpHを少なくとも0.5単位上回っているpH範囲内でのbsAkの溶離によって解決される。

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【図1】

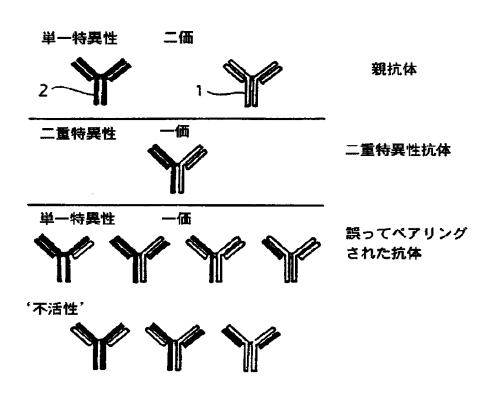
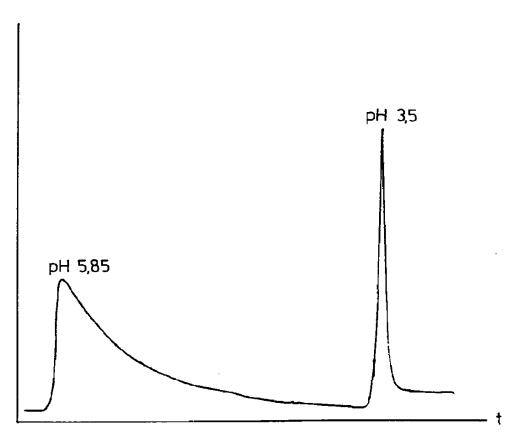
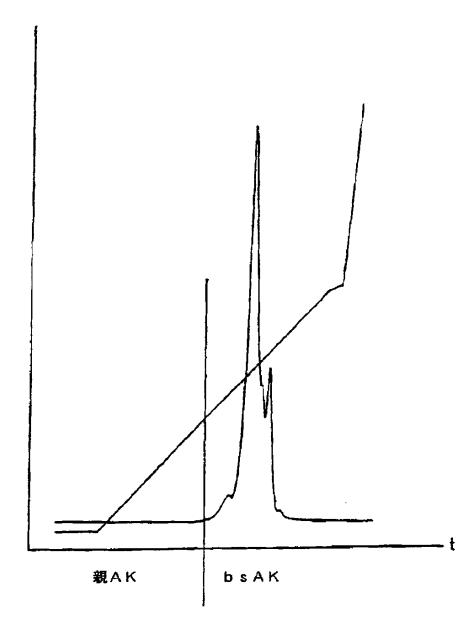


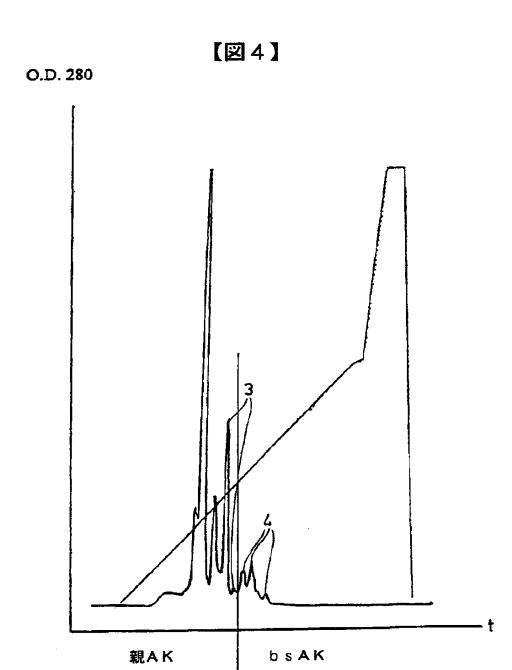
Fig. 2











INTERNATIONAL SEARCH REPORT

Interno al Application No PCT/EP 95/01850

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1PC 6	SIFICATION OF SUBJECT MATTER C12P21/08 C07K1/22 C07K16	/46		
According	to International Patent Classification (IPC) or to both national clas	sification and IPC	i	
H. FIELDS	S SEARCHED			
Minimum d IPC 6	documentation searched (classification system followed by classific C12P C07K	ation symbols)	·	
Documental	tion searched other than minimum documentation to the extent tha	st such documents are incl	ided in the fields searched	
Electronic d	lata base consulted during the international search (name of data b	use and, where practicul,	carch terms used)	
C. DOCUM	IENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where appropriate, of the	relevant passager	Relevant to claim No.	
X	GB.A.2 197 323 (NATIONAL RESEAR) DEVELOPMENT CORPORATION) 18 May see examples 2,6 see claims		1-4	
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		-/		
X Fun	ner documents are listed in the continuation of box C.	X Patent family:	nambers are listed in annex.	
<u> </u>	tegories of cited documents:	<u></u>	lished after the international filing date	
"A" document defining the general state of the art which is not considered to be of particular relevance		or priority date an gited to understand unvention	inot in conflict with the application but the principle or theory underlying the	
filing		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone		
which	ent which may throw doubts on priority distinfs) or is cited to establish the publication date of another n or other special reason (as specified)	"Y" document of particular relevance; the claimed invention campot be considered to involve an inventive step when the		
	ent referring to an oral disclosure, use, exhibition or	document is comb	ned with one or more other such docu- nation being obvious to a person skilled	
"P" docume	ent published prior to the international filing date but han the priority date claimed	in the art. "&" document member of the same patent family		
Date of the	actual completion of the international search	Date of mailing of	the international search report	
2	5 September 1995		13-10-95	
Name and s	mailing address of the ISA	Authorized officer		
	European Patent Office, P.B. 5818 Patentiaan 2 NL - 2220 HV Rijswijk Tel. (~31-70) 340-2240, Tz. 31 651 epo nl. Fast (+31-70) 346-3016	Nooij,	F	

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•	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		
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